

IN THE DRAWINGS:

Please amend FIG. 2 of the drawings as indicated in red ink on the "Replacement Sheet" attached hereto.

REMARKS

Reconsideration of this patent application is respectfully requested in view of the foregoing amendments, and the following remarks.

The amendments to the claims are as follows. Claim 1 has been amended to delete the reference numerals, and the alpha- numerics, in parenthesis in this claim. Claim 1 was also amended to cancel "being characterised in that" to replace this with "comprising." Claim 2 has been amended in order to cancel the reference numerals in parentheses. Claims 4, 5, and 6 have been cancelled. New claims 7, 8, and 9 have been added. Newly added independent claim 7 is based upon, and is supported by independent claim 1, except that paragraph (v) of claim 1 has been omitted from new claim 7.

New claim 8 is dependent upon claim 7, and is based upon and is supported by original claim 2.

New claim 9 is dependent upon claim 8, and is based upon and is supported by original claim 3.

On Page 2 of the Office Action, there was an objection to the drawings. In response thereto, FIG. 2 has been amended in red ink accordingly to overcome this objection. For example, reference numerals 24, 24' have been amended to become 27, 28 respectively; reference numerals 23, 23' have been amended to become 25, 26 respectively; reference numeral 33 has been amended to become reference numeral 35.

It is respectfully submitted that by amending the description of FIG. 2 according to the Patent Examiner's request, that this could lead to some confusion. In fact, objected to reference characters 24, 24' refer to parts of a hay rake each connected to an arm of a couple of arms (21 or 22) each having a specific structure and being articulated with respect to the relevant upright in a different way. Thus, different reference characters have been utilized, and have been changed, as suggested above, to 27, 28. Reference alpha-numeric E6 thusly has been amended to be E3.

As far as the objection to the reference character 23', as not being described in the Specification is concerned, this objection is respectfully traversed. It is respectfully pointed out that various elements as described are clearly understood by

one skilled in the art. This is already well known in the state of the art (see for instance bars 30 in *Peeters* and bars 15 in *Menichetti*). Accordingly, lines 20-25 on page 4 of the Specification have been revised and replaced with the following:

"On said drawbar 20 there can slide, controlled by actuation devices 33 arranged on drawbar 20, the ends E7, E8 of the arms 27, 28, the other ends of which being connected to arms 21 and 22 in the proximity of the free ends of the latter. Secondary arms 25, 26 are pivotally connected to intermediate points E3, E4 of arms 27, 28 and slide along drawbar 20, controlled by movement of said arms 27, 28."

The claims were rejected under 35 U.S.C. Section 112. This rejection is respectfully traversed.

(a) It should be noted that reference characters are correctly utilized to clearly identify different parts of the device as claimed, and do not "imply the structure or set forth the elements in place of a detailed description." For instance, connection of drawbar 20 to other parts of the rake, as well as operative relationship between the draw bar and such other parts, are clearly described in the present Specification, page 2, in lines 13-27, as well as in claim 1, page 6, in lines 7-19.

(b) It is unclear how the shape of drawbar 20 (in any case being not part of present invention, and well known in the relevant art) could be necessary in present claim 1.

(c) Claim 1 is presently drafted according to a well known standard, widely utilized all over the world. Accordingly, the words "characterised in that" are placed between a preamble of the claim defining the field in which the invention is intended to operate and a final part or claim body defining further structure. Thus, present claim 1 seems to clearly define the field, the structure and the nature of the invention.

However, claim 1 has been revised to cancel the reference characters, and to conform claim 1 to U.S. claim format requiring cancelling the phrase "characterising part" of a combination claim and by replacing this phrase by "comprising" followed by a series of indentations defining the various aspects of the structure.

For all these reasons, the drawings, the Specification, and all the claims are firmly believed to be in complete compliance with all the requirements of 35 U.S.C. 112. Withdrawal of this ground of rejection is respectfully requested.

The prior art rejection under 35 U.S.C. Section 103 of all the claims is respectfully traversed.

As discussed above, the present invention is characterized by the combination of the following:

1. One of the working arms (21, 22) bearing rake wheels (23, 24) is hinged to one of the uprights (12, 13) in a position corresponding to one of its own ends, while the other one is hinged to the other upright in a position corresponding to an intermediate point of its own length, thus projecting from the upright beyond the hinging point of the first arm.

2. Each of the uprights (12, 13) is provided with means for linear translation (31, 32) capable of moving the ends of said first arms close or away from one another;

3. The first horizontal working arms (21, 22) are formed by assembling a number of modules, variable at will.

4. Connecting joints between vertical uprights (12, 13) and horizontal arms (21, 22) are Oldham couplings, capable of enabling movement of the arms (21, 22) in vertical as well as in horizontal directions.

5. The draw bar (20) carries means (33) for controlling the movement of said first horizontal arms (21, 22).

It is also to be noted that hinging one of the horizontal arms (21, 22) in an intermediate position of its own length is intended to make "at least one of the terminal rake wheels of the longer arm...to surmount at least one of the terminal rake wheels of the other arm" (see page 4, lines 12-14); the above to ensure that no parts of the hay to be raked escape the action of the rake wheels.

It is respectfully submitted that none of the above inventive points is described or suggested by any of cited documents, either alone or in combination. In fact, *Peeters* describes (a) arms 24, 26 both hinged by relevant extremity on cross tree 96, thus leaving between such extremities a space corresponding to the cross tree length. This does not permit the collecting of hay present under the cross tree. There are (b) arms 26, 26 which can only rotate, and not translate, with respect to relevant hinge points in *Peeters*. Moreover, in *Peeters* there is no mention of the possibility of forming arms 24, 26 by assembling of a number of modules, nor of the utilization of Oldham joints to permit movement of these arms both vertically and horizontally. The only common point is that it utilizes means to control movement of these arms similar to the one present in the above point 5 of present invention.

Allen describes two arms 180 each hinged in an intermediate point of its own length, which does not permit rake wheels 210 of one arm to fully overlap corresponding ones of the other arm, when the arms are open in a working position, as can be seen in FIGS. 4 and 5. Moreover, *Allen* does not indicate the possibility of assembling arms 180 utilizing a number of modules, nor the utilization of Oldham joints.

Menichetti describes a structure completely different from the present rake and only describes means to control movement of these arms similar to the one present in the above point 5 of the present invention.

As far as the remaining claims are concerned, it is noted again that at page 4, in lines 8-17 of the present application, there is the possibility of making at least one of the rake wheels of the longer arm to surmount at least one of the wheel of the other arm. This is in order not to overturn and remove any hay, grass or the like over which the rake passes. In this respect, it is noted that *Peeters* is completely silent, while *Allen*, though bringing only one wheel of each of left and right arms 180 very close to one another does not mention the possibility to fully overlap at least one of the rake wheels of

the longer arm to surmount at least one wheel of the other arm, nor suggest the possibility to remove or overturn all the material over which the rake passes.

It is respectfully submitted that one skilled in the art has no motivation to combine any of the structural features of the secondary reference to *Allen* by substituting into the primary reference to *Peeters*.

More particularly, *Peeters*, in column 4, in lines 34 to 42, discloses an agricultural implement 20 which includes a primary frame 22, a right secondary frame 24, and a left secondary frame 26. The secondary frames 24 and 26 may each occupy a transport position or retracted relationship relative to the primary frame 22, as depicted in FIGS. 1 and 2. Alternatively, the secondary frames 24 and 26 may also occupy deployed positions or relationships relative to the primary frame 22, as depicted in FIG. 3.

Peeters, in column 6, in lines 37 to 45, discloses that adjacent the right outboard end 142, near the bracket 144, is a tip strut 156 which is connected at its outboard end to the right secondary frame 24 and projects inboard and rearward in an

ascending orientation, interposed between the wheel rakes. Tip strut 156 is connected to positioning assembly 28.

Peeters, in column 7, in lines 7 to 15, discloses that adjacent the left outboard end 162, near the bracket 164, is a tip strut 176 which is connected at its outboard end to the left secondary frame 26 and projects inboard and rearward, ascending to roughly the elevation of the tubular spine 72 and interposed between the wheel rakes. Tip strut 176 is connected to positioning assembly 28.

Peeters in column 7, in lines 20 to 24, discloses that the positioning assembly 28 includes a deployment slide 200 mounted on the primary frame 22 in the region of the deployment slide bearing surface 94 of the tubular spine 72. The deployment slide 200 is shiftable, forward and rearward, along the deployment slide bearing surface 94.

On the other hand, *Allen* more particularly discloses in column 5, in lines 21 to 25, that the apparatus 10 has a central or main frame 60 with a forward facing portion 61 and a rearward facing portion 62. The main frame 60 includes spaced first and

second tubular beams 63 and 64, respectively, each of which has a mouth portion 65 and an opposite end portion 66.

Allen, in column 5, in lines 43 to 53, discloses in FIGS. 1 and 5, first and second hydraulic cylinders 80 and 81 which are individually mounted internally of the first and second tubular beams 63 and 64 and are operable, upon expansion and contraction, coaxially to extend or retract the third and fourth tubular beams, as appropriate. The first and second hydraulic cylinders each have a cylinder portion 82 which has an orifice or channel 83 formed therein, and an extendable portion or ram 84. The rams 84 also have a channel or orifice 85 of like dimension formed in their distal end.

In *Allen*, support beams 180 are movable by first and second tubular beams 63 and 64, which are perpendicular to centrally disposed tubular beam 31.

Therefore, it would not be obvious to modify the apparatus of *Peeters* using the structure of *Allen*, because of the lack of structural compatibility. Specifically, in *Peeters*, the positioning assembly 28 has deployment slide 200 being shiftable forward and rearward along deployment slide bearing surface 94.

By contrast, in *Allen*, the first and second tubular beams 63 and 64 are operable perpendicular to the centrally disposed tubular beam 31.

Hence, there is no teaching, suggestion, or motivation in *Peeters* and *Allen* to combine these references. Any attempt to combine these structures would result in a radical reassembly of the prior art apparatus providing an inoperable structure, based upon hindsight reconstruction of the prior art.

For all the reasons set forth above, the present invention, and all the claims are firmly believed to be patentable over all the prior art applied by the Patent Examiner under 35 U.S.C. 103. Withdrawal of this ground of rejection is respectfully requested. A prompt notification of allowability is respectfully requested.

Respectfully submitted,
Adelmo GIOVANNINI

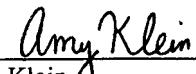


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ERF:lgh
Enclosures: Replacement Sheet FIG. 2.

I hereby certify that this correspondence is being deposited with the U.S. Postal Service as first class mail in an envelope addressed to: Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on September 24, 2007.



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